IN THE CLAIMS:

1. (Currently amended) A device for attaching to a living subject having a joint, comprising a first sensor, a second sensor, a processor, and a non-volatile storage device, said first sensor for attaching to a first body segment above the joint, said second sensor for attaching to a second body segment below the joint, wherein said first sensor and said second sensor each comprise a solid state inclination measuring device for determining inclination with respect to the gravity vector, wherein said ~~inclination~~ inclinations with respect to the gravity vector determined from said first sensor and from said second sensor ~~is~~ are processed in said processor and stored in said non-volatile storage device for distinguishing lying, sitting, and standing positions, wherein said processor and said non-volatile storage device are part of the device for attaching to the living subject.

2. (Canceled)

3. (Previously amended) A device as recited in claim 1, wherein said inclination measuring device comprises a dc accelerometer.

4. (original) A device as recited in claim 1, wherein said inclination measuring device comprises three accelerometers orthogonally mounted.

5. (original) A device as recited in claim 1, wherein said inclination measuring device further comprises a magnetometer.

6. (Previously amended) A device as recited in claim 1, wherein said inclination measuring device comprises a plurality of magnetometers.

7. (Previously amended) A device as recited in claim 6, wherein data from said magnetometers is for providing direction with respect to the earth's magnetic field.

8. (original) A device as recited in claim 1, wherein data from said first sensor is subtracted from data from said second sensor.

9. (original) A device as recited in claim 8, wherein said subtraction is to determine a difference in orientation.

10. (original) A device as recited in claim 8, wherein said first sensor and said second sensor are for measuring range of motion of said second body segment with respect to said first body segment.

11. (Previously amended) A device as recited in claim 10, wherein data from said range of motion measurement is analyzed for change of range of motion over time.

12. (original) A device as recited in claim 11, wherein initial values of said time dependent data are tared out to provide change from said initial values.

13. (Previously amended) A device as recited in claim 1, wherein said non-volatile storage device comprises a solid state device.

14. (Previously amended) A device as recited in claim 13, wherein said non-volatile storage device comprises a non-volatile memory chip.

15. (Previously amended) A device as recited in claim 1, further comprising a feedback mechanism.

16. (Previously amended) A device as recited in claim 15, further comprising a housing, wherein said first sensor, said storage device, said processor, and said feedback mechanism are all within said housing.

17. (original) A device as recited in claim 15, further comprising a housing separate from said first sensor and said second sensor, wherein said feedback mechanism is within said housing.

18. (original) A device as recited in claim 17, wherein said first sensor and said second sensor are wirelessly connected to said housing containing said feedback mechanism.

19. (original) A device as recited in claim 18, wherein said wireless connection is an RF connection.

20. (currently amended) A device as recited in claim 15, wherein said processor is programmed to activate said feedback mechanism ~~is activated~~ if a preset range of motion threshold has been exceeded more than a specified number of times.

21. (currently amended) A device as recited in claim 15, wherein said feedback mechanism includes a vibrator ~~provides vibratory or auditory feedback~~.

22. (original) A device as recited in claim 15, wherein said feedback mechanism comprises a piezo-electric buzzer or an electromagnetic shaker.

23. (currently amended) A device as recited in claim 15, wherein said feedback mechanism includes a vibratory or audio signal to provide ~~provides~~ feedback to provide one or more of the following: warn of a problem, discourage a movement, support a desired result, ~~or~~ and encourage a movement.

24. (currently amended) A device as recited in claim 23, wherein said processor is programmed to provide feedback if the living subject ~~problem comprises~~ repeatedly ~~exceeding~~ exceeds a pre-programmed inclination angle.

25. (original) A device as recited in claim 1, wherein said processor comprises a microprocessor, a signal processor, or a personal computer.

26. (Previously amended) A device as recited in claim 1, wherein data from said inclination determination comprises body segment inclination data as a function of time.

27. (Previously amended) A device as recited in claim 1, wherein data from said inclination determination comprises posture data as a function of time.

28. (currently amended) A device as recited in claim 1, further comprising an output to provide ~~wherein~~ data from said inclination determination ~~is used~~ for use to adjust physical therapy.

29. (original) A device as recited in claim 1, wherein said device further comprises a data entry system.

30. (original) A device as recited in claim 29, wherein said data entry system comprises a button.

31. (currently amended) A device as recited in claim 29, wherein said data entry system includes an input unit ~~is~~ for recording the presence of pain.

32. (currently amended) A device as recited in claim 29, wherein one or more of the following ~~time, date or other data~~ are recorded when said data entry system is used: time, date, and other data.

33. (Previously amended) A device as recited in claim 1, further comprising a program for displaying data from said inclination determination as a histogram showing number of inclinations at each angle range during a time period.

34. (Previously amended) A device as recited in claim 1, further comprising a program for displaying data from said inclination determination as inclination v. time.

35. (original) A device as recited in claim 1, further comprising a digital filter.

36. (Previously amended) A device as recited in claim 35, wherein said device may be subject to linear accelerations, wherein said digital filter is for reducing effect of said linear accelerations on the data.

37. (original) A device as recited in claim 35, wherein said digital filter comprises a low pass filter or a high pass filter.

38. (Previously amended) A device as recited in claim 1, wherein said inclination measuring device comprises dc accelerometers, wherein said device further comprises a high pass filter, wherein output of said accelerometers that passes through said high pass filter is subsequently integrated and used to compute a resultant velocity which is used to calculate energy used.

39. (currently amended) A device as recited in claim 1, wherein said processor uses inclination data from said first and second sensors ~~device is further~~ for determining body posture in said sitting position.

40. Cancel

41. Cancel

42. (Previously canceled)

43-91. Cancel

92. (Previously presented) A device as recited in claim 1, wherein said joint is a hip joint.

93. (Previously presented) A device as recited in claim 1, further comprising a sensor for further detecting posture based on curvature of the spine.

94. (Previously presented) A device as recited in claim 93, wherein said sensor is capable of detecting a kyphotic curvature of the spine.

95. (Previously presented) A device as recited in claim 94, wherein said processor is programmed to measure the time the subject has said kyphotic curvature of the spine and determines whether said time exceeds a preset value, and wherein said processor is further programmed to prompt the subject to move if said time exceeds said preset value.

105. (currently amended) A device as recited in claim 1, wherein said processor uses inclination data from said first and second sensors ~~solid state inclination measuring devices are further~~ for distinguishing bending in one said position.

106. (currently amended) A device as recited in claim 1, wherein said processor uses inclination data from said first and second sensors ~~solid state inclination measuring devices are~~ for distinguishing forward bending, backward bending, ~~or~~ and lateral bending.